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Please amend the subject application as follows.

In the Specification:

Please amend as indicated in the accompanying "Marked Up Version of Amendments".

In the application as submitted July 19, 2001, please replace paragraph 2 at page 2, lines 12-21, with the following paragraph.

a1

(Amended) Compounds which stimulate or induce bone growth at sites where such growth would not normally occur if left untreated are said to be "osteoinductive". An osteoinductive compound would have great value as a drug to treat the conditions described above. A number of osteoinductive proteins have been identified, isolated and expressed using recombinant technology. Examples include the bone morphogenic proteins (BMPs) disclosed in U.S Patent No. 5,902,705 and WO 95/16035. However, the use of recombinant proteins as therapeutic agents generally has a number of drawbacks, including the cost of manufacture, *in vivo* biodegradation and short shelf lives. Consequently, scientists are continuing to search for new osteoinductive agents which do not have the aforementioned shortcomings.

In the application as submitted July 19, 2001, please replace paragraph 3 on page 3, lines 10-17, with the following paragraph.

a2

(Amended) The method of the present invention is directed at stimulating bone growth in a subject and can be used at sites where bone growth would not occur, absent treatment with autologous bone grafts or administration of bone growth factors. The method involves the administration of agonists of the non-proteolytic thrombin receptor. Such agonists include small peptides, and physiologically functional equivalents, having homology to the segment between amino acid 508 and 530 of human prothrombin. These small peptides are inexpensive to prepare

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a² in bulk quantities and are osteoinductive at low dose. In addition, their lyophilized form is stable for at least thirty months when stored at 5° C and at 60% relative humidity.

In the application as submitted July 19, 2001, please replace paragraph 2 on page 7, lines 19-20 with the following paragraph.

a³ (Amended) TP508 is an example of a thrombin peptide derivative and has the amino acid sequence of SEQ ID: NO. 5. A physiologically functional equivalent of SEQ ID: NO. 5 is SEQ ID: NO. 6 which has the identical amino sequence of SEQ ID: NO. 5 and also contains a C-terminal amide.

In the application as submitted July 19, 2001, at page 6, between paragraph 1 and paragraph 2, at line 16, add the following two new paragraphs.

a⁴ (New) A physiologically functional equivalent of a thrombin peptide derivative encompasses molecules which differ from thrombin peptide derivatives in particulars which do not affect the function of the thrombin receptor binding domain or the serine esterase conserved amino acid sequence. Such particulars may include, but are not limited to, conservative amino acid substitutions and modifications, for example, amidation of the carboxyl terminus, acetylation of the amino terminus, conjugation of the polypeptide to a physiologically inert carrier molecule, or sequence alterations in accordance with the serine esterase conserved sequences.

(New) A thrombin receptor binding domain is defined as a polypeptide sequence which directly binds to the thrombin receptor and/or competitively inhibits binding between high-affinity thrombin receptors and alpha-thrombin.
